

**APPLICATION FOR
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for

MULTIPLE MEMORY GAME APPARATUS AND METHOD

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MULTIPLE MEMORY GAME APPARATUS AND METHOD

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CROSS REFERENCE TO RELATED APPLICATIONS

Applicant has filed his Disclosure Document Deposit Request relating to the present invention, and received file number 533584 for such Request on May 8, 2003.

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TECHNICAL FIELD OF THE INVENTION

The present invention relates to games and game activities in which the players utilize different human memory systems. More particularly, the present invention relates to new apparatus and processes for using, in playful activity, at least two, and generally three, of the brain's major memory systems: the short-term memory system, the semantic memory system, and the episodic memory system. Such play has elements of competition, typically by recollection of facts in timed competition with others in competitive (judged) play, and play without competition, typically by storytelling in non-competitive (judgment-free) play. In two preferred embodiments specifically, the present invention is incorporated into a board game or in decks of cards, or both, in which players exercise these memory systems. However, the present invention also includes any process which invokes or stimulates multiple memory systems when incorporated into any gaming apparatus.

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BACKGROUND ART OF THE INVENTION

Activities involving the use of memory by those playing (a "Player", or the "Players" if more than one Player is involved) are not new. One need look no farther than the nearest "Jeopardy" or "Concentration" television show, or the card game "Hearts," to see that such activities are well-known and exciting, competitive activities among humans. Successful

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memory-related play has in the past focused on the competitive aspects of memory, however, to the exclusion of non-competitive aspects. Thus, the goal in such activities is often to come to the correct answer first.

5 This general competitive approach to memory has permeated play activities, including play activities requiring the use of memory. The result of incorporating competitive activities into games which involve memory has been an abundance of competitive games now well known and successful, such as the television or card games mentioned above, or board games such as "Trivial Pursuit," or board game analogues of popular
10 television or card games.

Other games are used for teaching children or others, or developing recollection of more or less well-known facts, elements of mathematics, useful sciences, and the like. However, as with their television or real life analogues and competitive board games, such other memory
15 games again focus on competitive recollection. Competitive recollection, in turn, depends on the existence and determination of "predetermined facts," such as the definition or spelling of a word, the words or melody of a popular song, the identity of a recognizable character from history, the date of an historical event, the correct location of a correct answer responsive to a
20 question, and similar "facts." Although such game activities may include multiple topics and activities, the fundamental characteristics of each such game prior to the present invention are: (i) a focus only on use of a single human memory system as Players answer questions, or otherwise act to progress through the game, (ii) the determination of correct answers as
25 determined by game designers and/or occasionally the Players, and (iii) the determination of correct answers in competition between Players.

Other play activities, generally intended for therapy or education, are completely non-competitive, involving activities which may be therapeutic, or which may reinforce recollection of facts. However, even
30 these games focus on use of a single human memory system, and many of

these games also require the determination of correct answers.

Regardless of their character, however, all prior play activities requiring the use of memory are conducted in a competitive fashion, or a non-competitive fashion, but not in a fashion which requires (or even allows, consistent with any rules established for such activities) both competitive and non-competitive play activities. Moreover, all prior play activities of which the inventor is aware necessarily involve responses to questions or directions, which responses are "judged," or tasks which are not judged, but never both judged play and judgment-free play. The "judging" of responses is a determination of correctness of a response. Judging arises naturally out of questions or directions which call for facts or trivia, and responses to such questions which must be tested against objectively correct answers.

Games involving the use of a single human memory system obviously enjoy a high degree of popularity, and games involving only competitive activities (and only judged activities) include the most popular games. In fact, many people find non-competitive (and judgment-free) game activity unexciting. However, non-competitive (and judgment free) play prior to the present invention has not also been combined with competitive (and judged) play. Moreover, the recollection of facts utilizes only one kind of memory (i.e., "semantic memory"), while recollection of experiences draws on another kind of memory (i.e., "episodic memory").

It is important to recognize that, in play activities and games, the exercise of a single memory system is an incomplete experience. A much fuller human experience may be achieved by play which allows or requires the use of at least two, and generally three, human memory systems in a single play activity (or game), according to the present invention. This experience of employing such memory systems in play is, in one embodiment of the present invention, greatly enhanced when Players draw on their experiences to respond to questions or directions without being judged, thus combining in a single activity both competitive and non-competitive play,

while utilizing multiple memory systems.

Cognitive scientists have clearly established that the human brain makes use of information acquired in the past through various *memory systems*. There are numerous such systems which often use different regions of the brain and which, though interconnected in some ways, have been identified as separate memory systems.

Broadly speaking, two kinds of memory: short-term memory and long-term memory. These kinds of memory are sometimes thought of as “hard-wired” into the human brain, usually in different areas in the brain, in such a fashion that people can sometimes lose one kind of memory without adversely affecting the other kind of memory. Long-term memory has been further categorized as “semantic” memory and “episodic” memory (while other memory systems, such as “procedural” memory, have been identified, it is not necessary here to analyze every identified memory system, and we will instead focus on the three memory systems used by those playing one embodiment of the present invention).

Short-term memories often last for only seconds. Researchers believe that such temporary records depend on a specialized system called “working memory,” that holds small amounts of information for brief periods of time.

Semantic memory contains conceptual and factual knowledge, and most obviously pertains to the ability to recall facts and figures. Semantic memory contains “predetermined facts” - facts which may be generally known and remembered by many people.

Episodic memory allows people to explicitly recall “the personal incidents that uniquely define their lives.” Episodic memory draws from subjective experience, one’s personal life experiences.

Prior to the present invention, no play activity, and no board games or card games as particular kinds of play activities, explicitly combine (judged) activities with non-competitive (judgement-free) activities in a single

game. No such activities, board games, or card games involve, as the present invention involves, competitively (i) responding to questions about predetermined facts, and (ii) performing competitive activities requiring short-term recollection, and, at the same time or in the same game, (iii) non-competitively responding to judgment-free questions about events personal to a Player, or performing tasks involving such events (typically questions or directions which induce from a Player a story describing something personal to that Player).

10 In attempting to present people with exciting (or at least diverting) play, others have attempted to provide excitement or diversion using various apparatus and methods. Such apparatus and methods within the prior art include:

15 U.S. Patent Number 4,089,527 to Roth, which discloses a board game which requires association between predetermined (semantic) facts in a timed, competitive play.

U.S. Patent Number 4,114,877 to Goldfarb et al., which discloses tower apparatus which creates designs to be redrawn by players based on their (short-term) memory, in a timed, competitive play.

20 U.S. Patent Number 4,244,577 to Poulos, which discloses diagnostic educational memory skill game in the form of a board and cards, and a method for developing, improving, and diagnosing (semantic) memory skills.

25 U.S. Patent Number 4,640,513 to Montijo, which discloses a (semantic) memory educational game of skill and chance in which players spell, pronounce, or define words, remember numbers, answer question cards, all in a timed, competitive play.

30 U.S. Patent Number 5,004,244 to Johnson, which discloses a competitive (semantic) memory development game apparatus, consisting of cards, gaming pieces, die, a spinner, and other components, in which players gather points as they match known persons or personalities with pairs of

initials within an established time interval.

U.S. Patent Number 5,507,497 to Sivak, which discloses a game for stimulating the (semantic) memory of a player as that player answers questions from categories chosen by the landing of a die, in a timed, competitive play.

U.S. Patent Number 6,270,077 B1 to Cohen, which discloses a non-competitive (episodic) memory enhancement game which serves to stimulate the memories of persons suffering from memory loss due to Alzheimer disease, stroke, head injury, or other reasons for memory loss.

U.S. Patent Number 6,279,909 B1 to Alexander, II et al., which discloses a game having multiple activities which use different types of "competencies," identified in the work of Dr. Howard Gardner, in which players carry out activities in timed, competitive, play.

None of the inventions mentioned above require the use of more than one memory system, and none of the inventions mentioned above require the use of (i) semantic memory and short term memory, or (ii) semantic memory and episodic memory, or (iii) short-term memory and episodic memory (i.e., any two of the three recognized memory systems invoked by play using the present invention).

It may be worth further analyzing U.S. Patent Number 6,279,909 B1, because it based on an interesting, but somewhat vague and potentially confusing theory of human "competency" or "intelligence" as defined by the intelligence theorist Howard Gardner. A review of Gardner's works show his notion of multiple human "competencies" do not correspond with multiple memory systems. For instance, he has explicitly stated that "...many skills tested for perennially by psychologists - ranging from recall of nonsense syllables to production of unusual associations - fail to qualify...[as an 'intelligence']" covered by his theory (Frames of Mind, the Theory of Multiple Intelligences, by Howard Gardner, 1983, page 61). The skills which Gardner explicitly states fail to qualify as "intelligence" in this passage are

precisely one of those called for in most, and perhaps all, preferred embodiments of the present invention (primarily by use of short-term memory). It is further worth noting that all of the various embodiment of patent 6,279,909 B1 have exclusively used semantic memory.

5 In addition, various non-patented games are expressly directed to the use of memory for play, without engaging, explicitly or implicitly, more than one memory system (or even acknowledging the existence of such systems). Among such games are "The Harry Lorayne Memory Game," a memory improvement game published by Reiss in 1976, and based on the
10 famous memory expert's tricks, and "Trivial Pursuit," a game which involves semantic memory through recollection of more or less well-known historical, scientific, and other facts.

 While the inventions disclosed in these prior inventions and products fulfill their respective objectives, these prior inventions do not
15 require, describe, or suggest utilization of more than one human memory system in a single play activity, or in game play having both competitive (judged) and non-competitive (judgment-free) aspects. Until now, games have involved only a single memory system. Until now, games have used exclusively competitive tasks, or exclusively non-competitive tasks. Until
20 now, games have been played exclusively with judged responses to questions or directions, or exclusively with non-judged responses to such questions or directions.

 Utilizing the present invention, on the other hand, Players are required to invoke at least two memory systems and, in some embodiments,
25 three memory systems, and people may play games which call for competitive tasks and non-competitive tasks in a single play activity, and people may play games organized so as to perform tasks which are judged and non-judged in a single play activity. Each such addition to play provides an additional opportunity for people to engage parts of their memory which
30 are left out of play using games prior to the present invention.

Thus, while many of these prior games are highly entertaining, their failure to engage more than one memory system leaves some memory capabilities of people untapped and unused. It is pleasurable to use different regions of the brain called on by different memory systems. The failure to
5 engage more than one memory system also leads to rejection of games in the prior art by some prospective Players if such Players find play using only one memory system uninteresting or threatening. As a result, while the subject of playing a game may come up in a group, and there is agreement that such play would be amusing or diverting, the group often finds some
10 among the group reticent, or hesitant to play, with the further result that such group does not engage in such amusing or diverting play.

Accordingly, there exists a need for a game that utilizes more than one memory system in a single game involving memory-stimulating tasks which call on different memory systems. There exists a further need to
15 engage at least two memory systems, as each Player is required to play, in the same game, by recollection of at least two, and in some embodiments all three of the following:

- (i) predetermined fact utilizing semantic memory,
- (ii) fact or image utilizing short-term memory, and
- 20 (iii) personal experiences utilizing episodic memory.

There exists a further need to engage people in play which combines competitive tasks and non-competitive tasks in a single game, play where people may be judged in their responses to some tasks in the overall play activity, and not judged in their responses to other tasks within the overall
25 play activity.

DISCLOSURE OF INVENTION

Summary of the Invention

30 Scientists studying human behavior and function have long

recognized that there are multiple memory systems (alternatively “kinds” of memory or “types” of memory). Two of the most widely-known and universally recognized memory systems are “short-term” memory and “long-term” memory. These memory systems appear to utilize different regions of the brain, in such a way that disease or accident may affect, for instance, short-term memory without equally affecting (or adversely affecting) long-term memory. Cognitive scientists also recognize different memory systems within long-term memory, and have clearly distinguished between them. Thus, long-term memory is often now agreed to include both “semantic memory” and “episodic memory” (amongst other memory systems). The present invention engages at least two of these memory systems and, in some preferred embodiments of the present invention, three of these memory systems. Accordingly, (i) the use of short-term memory and semantic memory may be required in some embodiments of the present invention, while (ii) the use of short-term memory and episodic memory may be required in other embodiments of the present invention, (iii) the use of semantic memory and episodic memory may be required in yet other embodiments of the present invention, and (iv) the use of all three of these memory systems may be required in yet other embodiments of the present invention.

The subject of these memory systems have been explored at great length in scientific literature. One scientist of human behavior in particular, Dr. Daniel Schacter, professor and Chair of Psychology at Harvard University, has broadly surveyed and written extensively on human memory systems. His book, *Searching for Memory* (1996), is referenced throughout this discussion. The character of the three memory systems stimulated by play utilizing the present invention may be more fully appreciated by a review of such literature, including that of Schacter, and a full exploration of such literature here is not desirable or necessary. However, the engagement of two or more of these memory systems in playful activity is the subject of this patent application, and some explanation of the character of these three

memory systems as they are embodied in the apparatus and methods of the present invention is useful.

“Semantic memory” is, generally, the facility in humans to remember conceptual and factual knowledge, the “predetermined facts” mentioned above. The semantic memory system receives, stores, and recalls such knowledge. A persons vocabulary is an example of the kind of information held in semantic memory. The information contained in the semantic memory system may also be sometimes characterized as “objective” information, or “public” information, or the “knowing” of something. Such information has also sometimes been characterized as “trivia,” as such information is employed in the play of the game Trivial Pursuit, however trivia is only one kind of knowledge handled by the semantic memory system. Information of this nature, regardless of the term used to describe it, may be characterized, and shall occasionally be referred to in this application, as “facts.” Generally speaking, the knowledge encoded, stored and retrieved from the semantic memory system is not subjective or personally unique, though it may be interesting.

“Episodic memory,” on the other hand, is concerned with the memory of unique experiences, subjective impressions, personal feelings, and the like - things a person may recall from his or her life experiences. Thus, episodic memory may also be called “experiential memory.” Episodic memories are personally significant, and are concerned with the unique experiences of an individual. Such experiences usually leave a distinctive emotional “imprint” which is often associated with the recollection of the unique experience. Obviously, the recollection of episodic memories may rely in part on certain aspects of semantic memory such as one’s vocabulary, but only through the filter of subjective experience and impressions. The information held in episodic memory is used by people to tell stories about themselves. Episodic information is generally not purposefully memorized, while semantic facts often involve memorization.

“Short-term memory” is concerned with information that a person usually needs to remember for only a short period of time, i.e. between a few seconds and perhaps a few hours. Researchers believe that such temporary records depend on a specialized system called “working memory,” which holds small amounts of information for brief periods of time. One of the reasons that such memories are so fleeting is that working memory depends on a different network of brain structures than long-term memory.

In its simplest form, the present invention is an apparatus or method for stimulating and activating at least two human memory systems, short-term memory and semantic memory, short-term memory and episodic memory, or semantic memory and episodic memory, in a single “Game.” A single tasks involving one memory system is assigned by instructions or directions printed on a card. Thus, for instance, from one card a Player may be asked to respond to a question which may be answered by recounting a semantic fact and, in the same Game, but from another card, perhaps in a different deck, that Player may be asked to tell a story from his or her own life experiences. In this example, the semantic memory system is activated through a competitive (judged) activity (comprised of individual “tasks,” as discrete activities are incorporated into this invention), while the episodic memory system is activated through a non-competitive (judgment-free) activity. The two activities, while very different in nature, are put in strategic relationship to each other through rules governing Game play, which rules give Players certain rewards and privileges after completing the non-competitive (judgment-free) activity.

One simple version of the present invention comprises an apparatus for stimulating memory systems according to the Game, in the form of a board, with cards and rules, which includes the elements of the present invention. In one preferred embodiment of the present invention, the Game has two paths, which cross and are tied to one another at one or more

points, or “switches.” During play, as more fully set forth below for one preferred embodiment, Players may choose one path to begin play, but Players are at some point or time in the Game, consistent with its rules, required or allowed to “switch” to the other path. One path calls for completion of tasks involving semantic memory, and the other path calls for completion of tasks involving episodic memory, while switches call for completion of tasks involving short-term memory. In this version of the present invention, the switches between paths create and reinforce the strategic relationship between the tasks of the two paths, and path switching reinforces the use of short-term, semantic and episodic memory systems in a single Game.

Other simple apparatus for stimulating memory systems according to the present invention do not require the use of a board. One such apparatus is a single deck or multiple decks of cards which include the elements of the present invention. Using a deck of cards, Players may choose cards which call for completion of tasks involving semantic memory, episodic memory, and short-term memory. In this version of the present invention, and in other versions which follow, competitive (judged) and non-competitive (judgment-free) activities are put in strategic relationship to each other through rules governing game play, which give players certain rewards and privileges after completing the non-competitive (judgment-free) activity.

In yet another simple apparatus for stimulating memory systems according to the present invention, the single deck previously mentioned is split into two or more decks, each of which deck contains questions or directions calling for exercise of semantic memory, episodic memory, and short-term memory. In such embodiment, cards which call for exercise of one memory system reside in one deck, while cards which call for exercise of another memory system reside in another deck (i.e., the decks each correspond to only one memory system). Using such decks of cards, Players may choose cards from that deck which calls for completion of tasks which

stimulate semantic memory, or from that deck which calls for completion of tasks which stimulate episodic memory, or from that deck which calls for completion of tasks which stimulate short-term memory. However, choosing from the deck which stimulates short-term memory, as may be required

5 periodically by the rules of play, also at least occasionally results in a "switch" to the semantic memory deck on the next turn if the previous card was drawn from the episodic memory deck, or a "switch" to the episodic memory deck on the next turn if the previous card was drawn from the semantic memory deck.

In yet other embodiments of the apparatus for stimulating

10 memory systems according to the present invention, questions or directions to which Players must respond may be presented on a computer monitor, in response to programming residing on a personal computer, or other means capable of presenting such questions or directions according to a set of rules. While such rules may vary, depending on the mode by which the Game

15 designer may wish to engage the memory systems of the Players, all such rules consistent with the present invention establish a strategic relationship between competitive (judged) and non-competitive (judgment-free) activities; and involve the use of two or more memory systems in the same game.

Continuing with a description of the board game embodiments

20 of the Game, the paths of the Game when impressed on a board roughly parallel one another generally, and intersect one another from time to time, for the reason that the preferred form of play of the Game is play in which the Players are allowed (or required) to periodically select the path they wish to travel, and therefore periodically change (or reselect) the kind of tasks which

25 they are asked to perform as they respond to the stimuli of the Game. Such stimuli are generally in the form of questions or directions which guide the Player currently drawing such questions to a task which requires use of at least one of the three memory systems activated by the Game. In any individual question or direction, a proper response generally involves use of a

30 single memory system (until the switch to another path is allowed or

required). Thus, for instance, questions directed to the episodic memory are, in one preferred embodiment, generally encountered by movement along only one path, and that path generally exposes the Player so moving only to questions or directions which stimulate episodic memory.

5 Semantic memory deals with, and may be based on, generally accepted, objective facts which are easily quantifiable or verifiable. Semantic memory may be characterized as pertaining to commonly know facts and trivia, such as numbers, word-spellings, and important dates, facts and trivia which easily lend themselves to a wide variety of competitions. As noted
10 above, most board games call for recollection of facts, and so most board games utilize only the semantic memory system. The paths of the Game may be fairly direct and straight, or they may be curved or winding. However, the objective nature of semantic memory, on the one hand, and the subjective nature of episodic memory on the other hand, appears to allow a
15 for a natural "fit" in layout of the paths on the board. That fit in layout, in one embodiment, plays on the natural differences between these memory systems. Thus, the path in the Game upon which one may encounter semantically directed questions or directions is, in one embodiment of the present invention, on a correspondingly straighter path. This straighter path
20 in the Game is generally referred to herein as the "Memory Race."

Episodic memory, on the other hand, is personal; and is best served by tools that are non-competitive and judgment-free. The episodic memory system is clearly activated through non-competitive (judgment-free) storytelling. In the board version of the Game, the natural "fit" for questions
25 which elicit responses stimulating episodic memory is, in one embodiment of the present invention, a less straight path when compared to the semantic memory path. This second path may be, in one preferred embodiment, winding, meandering, curved, circular, or even apparently terminating, in a shape which in some sense more closely corresponds to the winding,
30 meandering, curved, circular, or even terminating character of memories

gleaned from the episodic memory of the Players. This “curvy” path (relative to the straighter short-term and semantic memory path) is generally referred to herein as the “Memory Lane.”

5 The intersections between the Memory Race and the Memory Lane, the points at which they join, are important to Game play in certain embodiments which include a board. The intersections are places of joiner of these paths, called “Memory Switches”, at which Players may, in some embodiments, choose to continue on the previously selected path, or move instead along the other, newly selected, path (i.e., Players switch paths). In 10 other embodiments, Players are required to switch paths and, in yet other embodiments, Players are sometimes required to switch, and sometimes may choose their path.

At such points of intersection between the Memory Race and the Memory Lane, a Player is required, in one preferred embodiment of the 15 present invention, to utilize his or her short-term memory. Upon correctly responding to the question or direction chosen for the Player who lands on a Memory Switch, that Player is allowed to change his or her path. The rules which allow Players to switch paths, thereby also allowing Players to use different memory systems from that used on the Player’s current or initial 20 path, help create and maintain the strategic relationship between use of competitive (judged) and non-competitive (judgment-free) activities, as well as between different memory systems.

In addition to the spaces utilized for Memory Switches, both Memory Race and Memory Lane have along their length a number of other 25 stops or spaces upon which Players may land in their turn, in movement across the board typical for board games, in which stops or spaces are counted as a Player moves consistent with a roll of die or dice. In short, a Player rolls a die or dice in such process, and moves along a chosen path a number of stops or spaces which corresponds to the number on the die or 30 dice once it or they come to rest. In the Game of the present invention, such

other stops or spaces may be few or many, but generally at least one other stop or space is situated on the Memory Race and on the Memory Lane between each Memory Switch. Each path, the Memory Race and the Memory Lane, is delineated at these stops or spaces by shapes or colors, so as to indicate the path upon which a Player finds himself or herself, and Memory Switches are similarly delineated with other shapes or colors. In one preferred embodiment of the Game, for instance, the spaces of the Memory Race are marked by squares, the spaces of the Memory Lane are marked by circles, and the spaces of the Memory Switches are marked by stars.

The questions or directions to which each Player must respond, whether calling on short-term memory, semantic memory, or episodic memory, are presented to Players from one or more decks of cards in one embodiment of the present invention. The deck or decks contain a plurality of cards, wherein each card bears indicia requiring a Player to perform a task, answer a question, or otherwise require something which, if the Player complies, will stimulate primarily one of the three identified memory systems. A response appropriate to the question or direction appearing on the card picked on a Player's turn will determine advancement of a marker on the playing surface of the Game. In one preferred embodiment of the board game of the present invention, questions or instructions which might require use of each memory system, are separated into three decks, the questions of each of the three decks corresponding to questions designed to stimulate of only one of the three memory systems. Thus, all questions calling for a task using short-term memory reside in one deck, all questions calling for a task using semantic questions reside in a second deck, and all questions calling for a task using episodic memory reside in the third and last deck. Each card of each deck of cards is marked with a distinctive color or symbol in such embodiment, and each marking of color and symbol matches that of one of the paths of the board. As a result, Players are easily directed to choose a card from the proper deck when they land on a space on one of the paths, or

when they land on a Memory Switch.

As a further explanation of the character of the cards of the Game, the cards determine the character of the memory type one must employ in responding to a question or direction residing on such cards, and so the nature of the question or direction, and the nature of the task to be performed. A card calling for use of semantic memory (a semantic memory card) will be drawn by a Player traveling along the Memory Race and landing on one of its spaces. For instance, a semantic memory card, or "Memory Race Card," may ask everyone playing the Game to participate, with paper and [might not be timed, but "rivers"] timer, in making a list containing as many commonly known items as each Player can within a specific recognizable category. Each Player may, for instance, be called upon to create, within one minute, "a list of rivers." The Player who creates the longest valid list of rivers wins that turn, and a right to advance, or other benefit.

A card calling for use of episodic memory (an episodic memory card) will be drawn by a Player traveling along the Memory Lane, and landing on one of its spaces. An episodic memory card, or "Memory Lane Card," may call for a story about a specific instance taken from the life of the Player. Such a card, for instance, may ask a Player to "Tell a story about one of the most memorable views or vistas you have ever seen." It is important to emphasize here that episodic memory cards call for judgment-free and non-competitive storytelling, based only on episodic memory. Non-competitive storytelling depends on exercise of the episodic memory system. Unlike the answers elicited from use of semantic memory cards, which answers are easily judged and are competitive activities, there is no objective right answer to a request to share a personal memory of a memorable vista. There is never a wrong answer on Memory Lane. Though non-competitive and judgment-free, episodic memory cards are, through the rules of play, put into a satisfying strategic relationship with the competitive, judged elements of the

Game, thereby creating a unique game experience not found in the prior art.

A card calling for use of short-term memory (a short-term memory card) will be drawn by a Player landing on a Memory Switch. A short-term memory card, or "Memory Switch Card" may call for a Player to

5 read two lists with terms which may have an unusual association with one another. That Player then "matches" (if he or she is able) one of such terms, when read by another Player, with the second such term using only his or her (short-term) memory of the two terms. Typically, a single short-term memory question will ask Players to perform a series of such matches in a single task,

10 as necessary to require effort in the use of short-term memory. Other short-term memory questions consistent with the present invention might call for remembering an appointment schedule or a fictitious grocery list, or other information that no one would ever have a reason to want to remember for longer than just a very short time. In order to assure the character of the

15 short-term memory questions and directions, and thereby assure stimulation of short-term memory, the data of the short-term questions of the Game distinguish, in one embodiment, the data on the short-term card set by using completely random words, numbers, data, and sounds that have no useful or commonly known (semantic) association or personally significant (episodic)

20 information. Of course, the semantic and episodic questions and directions, on the other hand are directed only to just such useful or commonly known (in the case of semantic memory) and personally significant (in the case of episodic memory) information.

Thus, a key difference in the character of the cards within each

25 deck of cards in one preferred embodiment is that each deck is designed specifically to call on only one memory system. In the case of semantic memory, or Memory Race, cards, the information elicited is commonly known and objectively determinable. In the case of episodic memory, or Memory Lane, cards, the information elicited is personal, subjective, and unique to a

30 single Player. In the case of short-term, or Memory Switch, cards, the

information elicited is generally meaningless to most people, or random in character, and generally always forgettable.

Each Player of the Game in one preferred embodiment of the present invention is provided with a marker which he or she uses to advance
5 along the Game board. In addition, the Game of such preferred embodiment includes at least one die, by which the Players determine the number of stops or spaces over which they may advance in their turn, and a timer, by which the Players may measure or limit the time each Player uses to respond appropriately to certain questions or directions presented to that Player. The
10 Game ends at the center of the Game board, where a stop or space is designated for recollection of the stories told during the Game. The character of that play is set forth more fully below, however the first Player to complete the final task "wins" the Game. This final stop or space near the center of the board is, in a preferred embodiment, termed the "Memory Center."

15 Thus, as described above, one embodiment of the present invention uses semantic memory, episodic memory, and short-term memory. Accordingly, in such embodiment, all three of these memory systems are simulated. However, the stimulation of even two memory systems in a single activity is specifically identified to be within the scope of the present invention,
20 so long as such use arises out of rules which require the use of at least two memory systems, which rules establish a structured and strategic relationship between the use of at least two memory systems.

In play, the Game of the present invention presents a series of steps which define a process in accordance with the present invention. In
25 such process utilizing one embodiment of the present invention, Players pick markers, receive pads of paper and pencils or pens, choose a Player to begin play, place their markers on the game board, and otherwise begin the play of the Game by means usual to board games.

30 From this point, however, the play of the Game of this embodiment of the present invention diverges from that of all other games of

which the inventor is aware. In the description of the process which follows, all Players act in their turn, in a way common to board games generally, from selection of which path to begin play through the end of play. Therefore, the following steps are described as steps for all Players in their turn, and
5 appropriate modifications are noted, where the play of this embodiment of the Game involves the following new steps:

1. The Players select which of the two paths on the game board (i.e., the Memory Race or the Memory Lane) they will initially travel as they
10 begin play.
2. The Players place their markers on the first space of the Memory Race, or on the first space of the Memory Lane, whichever path they have chosen according to the previous step.
15
3. The Players roll the die or dice to begin their turn at play (although the first roll of the die or dice may precede selection of paths or placement of markers according to the immediately preceding step).
- 20 4. The Players move their markers along their chosen path the number of stops or spaces along such path consistent with the number indicated on the die or dice after their roll. After such movement, the Players have moved their markers to the last stop or space in the movement of his or her marker during their turn, at which time the markers come to
25 rest, or "land on" (or near) such stop or space.
5. The Players select a card from the set of cards which correspond to the character of the space upon which they land, in the case of travel on the Memory Race or the Memory Lane, or the Players select a card
30 from the set of Memory Switch Cards if the Players land on a Memory

Switch, regardless of whether they are traveling along the Memory Race or the Memory Lane.

- 5 6. If Players land on a Memory Switch space, and so select a Memory Switch Card, they are asked to complete the task called for by the question or direction of the Memory Switch Card so selected. If Players successfully complete the Memory Switch task, they may advance one additional space onto the path of their choosing (in some embodiments) or may be required to switch to the other path (in other

10 embodiments). If Players do not successfully complete the Memory Switch task, Players must stay on the Memory Switch until their next turn, and then proceed on the next turn onto one or the other path according to the rules.
- 15 7. If Players land on a Memory Race space, and so select a Memory Race Card, some or all Players are asked to complete the task called for by the question or direction of the Memory Race Card so selected. Players who complete (or best complete) such task advance their markers forward one additional space, and may choose which path to

20 take on their next roll (in some embodiments) or may be required to switch paths (in other embodiments).
- 25 8. If Players land on a Memory Lane space, they select a Memory Lane Card, and read the Memory Lane Card so selected, and respond (appropriately to that card), generally by telling a story from the Player's personal life experiences. After a Player tells a story responsive to the Memory Lane Card chosen, Players may then move their markers forward one stop or space and, in the same turn, also move the marker of any one other Player one stop or space in any

30 direction. The ability to move another Player's marker, in combination

with moving one's own marker, and occasionally in combination with other rewards outlined below, is unique to Memory Lane, and forms part of the basis of the unique strategic relationship between competitive (judged) and non-competitive (non-judged) elements in the Game, and part of the of the unique strategic relationship between experiential memory and other kinds of memory. Additionally, Players keep their Memory Lane Cards after they have answered them. Once a Player has answered a certain number of Memory Lane questions and collected a corresponding number of Memory Lane Cards (in one preferred embodiment they try to collect three cards), that player may switch positions with any other player on the board.

9. As noted above, Players take turns rolling the die or dice, and moving in turn as set forth above. Accordingly, Players repeat the above processes from and after step three above, until one Player lands on the Memory Gate at or near the center of the Game board, at which space that Player may proceed on the next turn to the Memory Center, usually selecting a question or instruction of his or her choice.

10. The Player first landing on the Memory Center is asked to complete the task at that space to "win" the Game. The task, in one preferred embodiment, is to recall and recount at least seven Memory Lane stories told by the other Players during the course of the Game, or as many stories told during the Game if there are less than seven. If the Player first landing on the Memory Center does not or cannot tell all seven stories, or all stories which have been told, play continues as described above, until another or the same Player lands on the Memory Gate, answers the question correctly, proceeds to the Memory Center, and recounts the required number of stories.

11. The first Player to recount the required number of stories told during the Game play then moves his or her marker to the center of the board (the "Memory Center"), thereby "winning" the Game.

5 In various embodiments of the Game, the above process and play of the Game is provided with further interest, and further rules creating the strategic relationship between memory types, by the following means:

- 10 • When a Player selects a card from the Memory Race deck, all Players should be at least a little familiar with the subject matter of the question or direction; if the question or direction is objectionable to any Player, the Player selecting the card from the Memory Race deck should choose another card in most embodiments of the present invention.

- 15 • When a Player selects a card from the Memory Lane deck, that Player, in some embodiments, may choose another card if that Player is unable, for any reason, to respond to the question or direction appearing on the Memory Lane Card. In other embodiments, the Player selecting the card must answer the question or respond to the direction. In yet other embodiments, Players are subject to a "truth or dare" rule, in which Players may at times "bluff" by making up an "untrue" story.

- 20 • When a Player selects a card from the Memory Switch deck, that Player must, in some embodiments of the Game, switch between paths of the Game. However, in other embodiments of the Game, Players may switch paths if they feel like switching paths.

25 If two or more Players "tie" when correctly responding to questions or directions on cards drawn from the Memory Race deck (each Player

30

answers equally well), each such Player may advance one space.

- 5 • When a Player has retained three Memory Lane Cards, that Player may switch positions on the Game board with any other Player on the board. This is another example of the unique strategic relationship between competitive and non-competitive elements within the single Game of the present invention.

10 Movement along the paths of the Game board is therefore controlled by a variety of means - rolling die, drawing cards, earning reward advancement, or being moved by another player when they answer a Memory Lane question, and so on. And while a Player may generally prefer telling stories, thereby using episodic memory, over answering other types of questions requiring short-term memory or semantic memory, Players may, in

15 one embodiment, choose to switch paths from time to time (in the process of using their short-term memory system) to experiment by utilizing their semantic and episodic memory systems. Additionally, Players are occasionally required to switch paths as they land on a Memory Switch, or as others move a Player's marker onto a Memory Switch. As a result, each

20 Player is exposed to a play which may exercise all three memory systems--short-term, semantic, and episodic--in a rich and rewarding play with others.

25 Although the preferred embodiment illustrated in the detailed description below is in the form of a board game, the Game of the present invention may also be configured for computer use, multi-media, and other apparatus. Thus, other configurations are also within the scope of the present invention. Without limiting the generality of the Game of the present invention, such configurations include (i.) computer-based games running on software for a personal computer, or a computer network, (ii.) use of the

30 Memory Race, Memory Lane, and Memory Switch Card decks, as noted above, without a board or other game apparatus, (iii.) use of lists of questions

taken from such card decks, (iv.) other casual play, using any apparatus which stimulates and activates any two of the recognized memory systems noted herein, or (v.) other casual play, using any apparatus which stimulates and activates all three recognized memory systems noted herein.

5 The more important features of the invention have thus been outlined, rather broadly, so that the detailed description of one embodiment thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. Additional features of specific embodiments of the invention will be described below. However,
10 before explaining preferred embodiments of the invention in detail, it may be noted briefly that the present invention substantially departs from pre-existing apparatus and methods of the prior art, and in so doing provides the user with the highly desirable ability to exercise and stimulate at least two of the memory systems noted herein, or all three of such systems. Additionally, no
15 board games, and no activities of which the inventor of the present invention is aware, involve the strategic integration of competitive and non-competitive aspects in a single Game. No games involve, as the present invention involves, competitively (i) responding to questions about predetermined facts using semantic memory, and (ii) competitively performing activities requiring
20 short-term recollection, and, at the same time and in the same game, (iii) telling stories about events personal to a Player, or performing activities involving such events in a judgment-free, non-competitive way, typically by responding to questions which induce from a Player a story about subjective, and personally unique experience in that Player's life.

25

Objects of the Invention

 A principal object of the present invention is to stimulate and activate multiple distinct memory systems, generally via a board game apparatus, but more specifically with any apparatus or process which
30 engages two or more of such memory systems in a single play activity.

A further principal object of the present invention is to stimulate use of at least two, and in some embodiments three, human memory systems in a single Game.

5 A further principal object of the present invention is to strategically combine in a single Game both competitive and non-competitive tasks.

A further principal object of the present invention is to strategically combine in a single Game both judged game play and judgment free game play.

10 A further principal object of the present invention is to provide a Game apparatus comprising cards by which individuals may engage in activities involving at least two, and in some embodiments three, human memory systems.

15 A further principal object of the present invention is to provide a Game apparatus comprising a board, with indicia, by which individuals may engage in activities involving at least two, and in some embodiments three, human memory systems.

20 A further principal object of the present invention is to provide a process which stimulates and activates at least two, and in some embodiments three, human memory systems, which process may be incorporated into a variety of apparatus consistent with the present invention.

25 A further principal object of the present invention is to provide a Game which creates a strategic relationship between questions, directions, or instructions, and the tasks which are responsive thereto, and uses that relationship to stimulate and activate at least two different human memory systems.

30 A further principal object of the present invention is to provide a Game which creates a strategic relationship between questions, directions, or instructions, and the tasks which are responsive thereto, and uses that relationship to stimulate and activate at least two different human memory

systems by means of an apparatus and process consisting of a board, cards with indicia, and rules, which invoke two or more of such memory systems in a single Game.

5 Brief Description of Drawings

 The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate one embodiment of the present invention, and such drawings, together with the description set forth herein, serve to explain the principles of the invention.

10 Fig. 1 is a plan drawing of one preferred layout for a board of the Game of the present invention, which board depicts the two paths of the Game of the present invention, a Memory Race and a Memory Lane, along with Memory Switches where the paths cross, additional stops or spaces where Players may land with their markers, a Memory Gate near the center of
15 the board, and a Memory Center.

 Fig. 2 is a frontal view of a representative card taken from the Memory Race deck of cards of the Game, formed in accordance with the present invention, showing a typical question directed toward eliciting a response requiring the exercise of the human semantic memory system.

20 Fig. 3 is a frontal view of a representative card taken from the Memory Lane deck of cards of the Game, formed in accordance with the present invention, showing a typical question directed toward eliciting a response requiring the exercise of the human episodic memory system.

 Fig. 4 is a frontal view of a representative card taken from the
25 Memory Switch deck of cards of the Game, formed in accordance with the present invention, showing a typical question directed toward eliciting a response requiring the exercise of the human short-term memory system.

 Fig. 5 is a flow chart diagram of the method of the present invention when using the apparatus of any embodiment of the invention set
30 forth herein.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Apparatus of the Invention

5 Referring initially to Fig. 1, a first embodiment of the present invention is shown in plan view. In Fig. 1 a Game board 1 having a playing surface 2 bears various indicia helpful to the practice of the present invention. Such indicia define, generally, two paths for play of the Game, those paths being the Memory Race 3 and the Memory Lane 4. The Memory Race 3 has
10 a starting point, at a starting space 5. The Memory Race 3 also has a plurality of additional stops or spaces 6 along its length, at which spaces a Player may select a card from a first deck of cards (not shown) containing Memory Race Cards, as described in greater detail below. The Memory Lane
15 4 also has a starting point, at a starting space 7, and a plurality of additional stops or spaces 8 along its length, at which spaces a Player may select a card from a second deck of cards (not shown) containing Memory Lane Cards, as described in greater detail below.

The Memory Race 3 and the Memory Lane 4 are each directed, or biased, so that Game play consistent with the rules allows Players
20 generally to proceed from the Memory Race starting space 5, or from the Memory Lane starting space 7 along each path in one direction only. By so proceeding, Players may travel along the Memory Race 3 or the Memory Lane 4, and generally toward the center of the board 1. At or near the center of the board 1, there are Memory Gate spaces 10, to which each path
25 connects. A Memory Center space 11 is centrally located on the board 1 of the Game, and indicates the end position of the Game near the center of the board 1.

Other indicia on the Game board 1 of the present invention define Memory Switches 15 at the intersection of the Memory Race 3 and the

Memory Lane 4. At Memory Switches 15, Players may, and sometimes are required to, change the path upon which they travel, consistent with the rules of the Game. While the Memory Race 3 and Memory Lane 4 need not be long, each path may be of any length, and each path may be laid out in any configuration across or around the board 1, so long as the Memory Race 3 and the Memory Lane 4 cross at least once, providing an opportunity for Players to switch paths using Memory Switches 15.

The Game has three sets or decks of cards (not shown), from which the Players draw at least one card during his or her turn. The sets or decks of cards contain questions, instructions, or directions which may elicit a response in the Player drawing such cards. As discussed above, three of the recognized human memory systems are the semantic memory system, the episodic memory system, and the short-term memory system. The cards call on the use of, and stimulate the use of, these three memory systems.

However, each set or deck of cards corresponds to only one memory system, and the cards of each deck are keyed to the paths of the Game so that Players landing on a space on one path will pick a card corresponding to that path. There are three sets or decks of cards, and the cards of each deck correspond to only one of these three memory systems. Accordingly, responses to questions or directions appearing on the cards of the three decks, consistent with the rules of the Game, stimulate and activate in Players, each in turn, (i) semantic memory, as Players travel along the Memory Race and draw Memory Race Cards, (ii) episodic memory, as Players travel along the Memory Lane and draw Memory Lane Cards, and short-term memory, as Players land on Memory Switches and draw a Memory Switch Cards. Thus, the cards determine the character of the memory type one must employ in responding to a question or direction residing on such cards. According to the rules of the Game, Players are exposed to tasks requiring the exercise of each type of memory, as the tasks of the cards contained in the three decks of the Game (questions,

instructions, and directions) stimulate each type of memory.

Referring now to Figs. 2-4, representative cards are shown as they are taken from each of the three decks of the Game. The cards from within each deck or card set are similarly configured, except that each card in all three decks bears a different question or task. Each card of the Memory Land deck uses only one set of instructions and only one task, although each Memory Lane question is unique. Similarly, each card in the Memory Race Deck uses only one set of instructions and one task, although each Memory Race is unique. On the other hand, there is a plurality of instructions in the Memory Switch deck, as well as a plurality of activities, although they all pertain to short-term memory. The cards from each deck may also each bear indicia representative of all cards taken from that deck, such as the name of the three decks, Memory Race, Memory Lane, and Memory Switch, and any individual card may also bear indicia appearing only on that card (its source from among the three decks being irrelevant).

Referring specifically to Fig. 2, a Memory Race Card **20** is depicted, in which the Memory Race Card bears indicia representative of all cards taken from that deck, i.e., the Memory Race Card deck name, "Memory Race" **21**. Memory Race Card **20** also bears, in this case, no additional indicia except instructions which are the same for every Memory Race card **22**, in which all Players are asked to develop a list of items of a specific category **23**, the category in this case being "rivers." Memory Race cards are designed specifically to stimulate and activate semantic memory (the semantic memory system). Responding to the instructions appearing on this Memory Race Card (or following the directions or instructions appearing on other Memory Race Cards), each Player develops a responsive list during a one-minute timed interval. The Player with the longest (valid) list developed during such period "wins" the right to advance one space forward on to a Memory Switch. Every card in the Memory Race deck bears a question, directions, or instructions of similar character in which, when (properly)

responding, a Player exercises his or her semantic memory. Memory Race Cards used in a Player's turn are returned to the deck containing semantic memory cards upon completion of that Player's turn.

Referring specifically to Fig. 3, a Memory Lane Card **30** is depicted, in which the Memory Lane Card bears indicia representative of all cards taken from that deck, i.e., the Memory Lane Card deck name, "Memory Lane" **31**. Memory Lane Card **30** also bears, in this case, no additional indicia except an instruction **32**, in which the Player drawing the card is asked to tell a story about an incident or episode in his or her life **33**, the episode in this case being "a story about one of the most memorable views or vistas they have ever seen." Memory Lane Cards are designed specifically to simulate and activate episodic memory (the semantic memory system). Responding to the instruction appearing on this Memory Lane Card (or following the directions or instructions appearing on other Memory Lane Cards), the Player drawing this Memory Lane Card responds by relating a personal incident or story from their past about "a memorable view or vista." The Player completes this task by relating such an incident as a story, the form and details of which are entirely up to the Player. With the completion of the task identified by the Memory Lane Card, the Player "wins" the right to advance one space forward on the Memory Lane, and the additional right to move any other (one) Player any direction along his or her present path (including onto or away from a Memory Switch). The set of cards within the Memory Lane deck of cards each bear questions, directions, or instructions of similar character in which a Player exercises his or her episodic memory. Memory Lane Cards are retained by the Players, for later use consistent with the rules of the Game, and the process of the present invention.

Referring specifically to Fig. 4, a Memory Switch Card **40** is depicted, in which the Memory Switch Card may bear indicia representative of all cards taken from that deck, i.e., the Memory Switch Card deck name (not shown in this embodiment). Memory Switch Card **40** also bears, in this

case, no additional indicia except a category of questions **41**, to orient the Player drawing this card, and an instruction **42**, in which the Player drawing the card is asked to recall specific items from the Memory Switch Card **43**, the items in this case being a random series of one syllable sounds. Players drawing this card recall (if they are able) the exact sound sequence, which is verified by another Player. Typically, a single short-term memory question will ask Players to perform a series of such tasks in a single turn, as necessary to require effort in the use of short-term memory. Other short-term memory questions consistent with the present invention might call for remembering an amusing appointment schedule or unusual grocery list, or other information that no one would ever have a reason to want to remember for longer than just a very short time. In order to assure the character of the short-term memory questions and directions, and thereby assure stimulation of short-term memory, the data of the short-term questions of the Game use random words, numbers, data, and sounds that have no useful or commonly known (semantic) association or personally significant (episodic) information. With the completion of the task identified by the Memory Switch Card, the Player "wins" the right to advance one space forward in the Game after switching paths (as noted herein, Players may choose their path at this point in some embodiments).

Memory Switch Cards are designed specifically to stimulate and activate short-term memory (the short-term memory system). The set of cards within the Memory Switch deck of cards each bear questions, directions, or instructions of similar character in which, when properly responding, a Player must exercise his or her short-term memory. Memory Switch Cards used in a Player's turn are returned to the deck containing short-term memory cards upon completion of that Player's turn.

Markers typical of board games generally, a die or dice for determining the number of spaces each Player may move (in conjunction with movement after appropriately responding to a Game card as set forth above),

a timer, and other components of the Game (all not shown) may be of character or configuration standard in the board game industry. Accordingly, Players roll a die or dice in turn, move their markers in turn, respond to questions or instructions presented on Game cards, orally or in writing on the paper pad provided. Some of these tasks must be accomplished within time limited intervals as required by the rules of the Game, and measured by the supplied timer. In accomplishing their tasks the Players each have an opportunity to choose the path upon which they wish to travel initially (and therefore the tasks they will undertake). However, in this preferred embodiment, Players must switch between paths when landing on a Memory Switch. In other embodiments, Players may make decisions about continued travel along the path so chosen, or select another path upon which to travel (and therefore the different tasks they will undertake). Consistent with the rules of play, Players move along their initially chosen path until they land on a Memory Switch, at which time a switch to the other path is required (in this embodiment). Consistent with the give and take of Game play and the successful accomplishment of their tasks consistent with the rules, therefore, the Players will undertake tasks calling for at least two kinds of memory, and in this embodiment three kinds of memory, and the Game play will thereby stimulate the memory systems from which such memories arise.

The Players will call on various memory systems consistent with the layout of the board and the rules of play, and the strategic relationship established between such memory systems by the board and the rules. In the course of the Game, one Player will reach one of the two Memory Gate spaces **10** before the others. The first Player to reach either of the two Memory Gate spaces **10** must successfully complete a task from one of the three decks, usually chosen by the other Players. If the Player reaching a Memory Gate space **10** successfully completes the task, that Player may then enter the Memory Center **11**. At the Memory Center **11**, that Player may then attempt to recall and recount the required number of stories told during

5 It is important to note that the Game of the present invention,
and all embodiments of the present invention, include both competitive and
non-competitive aspects. Moreover, all Players during the course of the
Game call on multiple memory systems available to them, using such
memory to perform the tasks responsive to the questions or directions of the
10 Game. Some of such tasks are judged by other Players, and some of such
tasks are not judged (except for compliance with the rules). As a result,
Players develop strategy and make choices which affect what tasks they will
perform, and therefore what memory systems will be utilized. This creates a
strategic relationship between these tasks in the implementation of the
15 Game. The Game also allows Game Players of all proclivities to immediately
enjoy some aspects of the invention, exercising memory systems which are
untouched by other games, and exercising memory capabilities which are not
used in any other single play activity. The result of play consistent with the
present invention is an exciting, engaging, and even therapeutic activity,
20 which presents a fuller and more satisfying play experience for most Players.
That fuller experience, as noted above, may also be attained, even without
the apparatus of the present invention, using the process of the present
invention as set forth more fully below.

25 *Process of the Invention*

In play, the Game of the present invention, whether using the apparatus set forth above or other apparatus, presents a series of steps which define a process in accordance with the present invention. In such process the Players pick a marker, receive a pad of paper and a pencil or

pen, choose a Player to begin play in a manner usual to games, place their markers on the board of the Game, and otherwise begin the play of the Game by means usual to board games (such as, for instance, rolling the die or dice to determine who is to move first, etc.).

5 Referring now to Fig. 5, a flow chart appears which schematically represents one example of the process which is a principal feature of the present invention. In Fig. 5, a preferred embodiment of the stimulation of three memory systems using the processes of the present invention is comprised of a series of steps, each of which step is represented
10 by a rectangular box. The order of these steps is represented serially by the direction of the arrows between the steps. Thus, one step may be seen to be the step in which a Player is supplied with materials for play, chooses a marker with which to measure progress, and like activities (at "Prepare to Play" 101). Immediately thereafter, another step is taken, and so on, until the
15 method of play for the Game of the present invention is complete.

In the steps of Fig. 5, Game Players begin the process at the point labeled "X." Beginning at "X," all Players first prepare to play the Game 101 by selecting a marker from a stock of such markers, receiving a pad of paper and a pencil or pen, choosing a Player to begin, placing their markers
20 on the board of the Game, and otherwise beginning the play of the Game by means usual to board games. The Player chosen to move first (and other Players after that Player in their turn) then selects a path upon which to travel 102, and places his or her marker on the chosen path and rolls a die or dice 103 to determine the number of stops or spaces he or she will move along
25 that path. When the die or dice come to rest after being rolled, the Player (and other Players after that Player in their turn) then moves his or her marker on the chosen path the number of spaces indicated on the die or dice 104.

Returning to the step in which Players select one of two paths
30 102 to begin play, the paths of the Game are significantly different, with

completely different content, potential consequences and game strategy. Selection of one of two paths **102** is new for board games, and for all play processes, because this step requires for the Players a selection of the kind of task they wish to perform in response to the cards of the Game, and such selection involves an estimation of which of the three memory systems the Players wish to exercise. From this point, the play of the Game of the present invention further diverges from that of all other games of which the inventor is aware, the play of the Game involving the following new steps:

Continuing with Fig. 5, after Players move their markers on the chosen path a number of spaces consistent with the roll of the die **104**, they then select a card from that deck of cards of the Game matching the space upon which they land **110**. Accordingly, Players select a Memory Race Card if they land on a Memory Race space, a Memory Lane Card if they land on a Memory Lane space, and a Memory Switch Card if they land on a Memory Switch. Having selected a card from the appropriate deck, Players then respond to the question or instruction appearing on that card.

Beginning with a response to a Memory Switch Card **111**, if Players complete the response assigned by the Memory Switch Card **112**, they are required to choose a new path and advance one space along that new path **113** (or in other embodiments Players may choose a new path at their option). However, if Players do not successfully complete the response assigned by the Memory Switch Card **112**, they must await their next turn **150**. Memory Switch Cards may call for a Player to read and recall two terms which may be associated with one another, and matches one of such terms with the second such term using only his or her (short-term) memory of the two terms, call for remembering an appointment schedule or grocery list, or other information most people would find useful for only a short time. Memory Switch Cards call for recollection data, words, and sounds that have no commonly known (semantic) or personally significant (episodic) information.

Returning to the selection of cards after Players move their markers **104**, Players select a Memory Race Card if they land on a Memory Race space **110**. Having selected a card from the appropriate deck (Memory Race deck), the Player so selecting, or all Players with some Memory Race Cards, are then asked to respond to the card so selected **121**. Such responses call for use of semantic memory when Players travel the Memory Race and land on one of its spaces. Semantic memory may call for a specific piece of commonly known or recognized factual information from history, or a list containing as many commonly known items as Player can recall within a specific recognizable category, or other semantic facts. The Player who wins the Memory Race competition **122** then advances **123**. However, if Players do not successfully complete the response assigned by the Memory Race Card **122** (or fail to produce the best response), they must await their next turn **150**.

Returning to the selection of cards after Players move their markers **104**, Players select a Memory Lane Card if they land on a Memory Lane space **110**. Having selected a card from the appropriate deck (Memory Lane deck), Players then respond to the question or instruction appearing on that card **131**. Beginning with a response to a Memory Lane Card **131**, Players complete the response assigned by the Memory Lane Card **132**, Players may then advance one space along their path, and move any other Player one space in any direction **133**. Players also keep their Memory Lane Cards **134** and, upon collecting a total of three Memory Lane Cards, may switch positions with any Player on the board (not shown). Memory Lane Cards call for use of episodic memory, generally in the form of a story about a specific instance taken from the life of the Player. All such storytelling is judgment free and non-competitive. There is no objective right answer to the call of a Memory Lane Card, and there is never a wrong answer on Memory Lane. Contrary to the competitive play found in most games, regardless of the response to a Memory Lane Card, after their turn Players may advance

one space in any direction **133**, and retain their card from that turn to start or add to a collection of Memory Lane Cards for later use **134**. Players on the Memory Lane always advance, at least one space, but do not play again unless they have reached the Memory Gate **141**.

5 The game continues in this manner until a Player reaches a Memory Gate space **140**. When a Player reaches a Memory Gate space **140**, he or she may have a choice of tasks, taken from among the tasks and decks of the Game, but more often the Player reaching a Memory Gate space responds a task chosen by the other Players **141**. If the Player on the

10 Memory Gate completes the assigned task **142**, that Player may then move to the Memory Center **160**, and then attempt to recall the required number of stories told during the Game (typically seven). If that Player does so recall the requisite number of stories **161**, he or she then "wins" the Game **170**. However, if the Player does not complete the task assigned him or her **142**,

15 he or she then awaits his or her next turn at the Memory Gate, to then again respond to a task chosen by the other Players **141**. Further, if the Player reaching the Memory Center does not recall the stories told during his or her turn, he or she then awaits his or her next turn **162** before again attempting to recall the requisite number of stories **161**. Until a Player moves to the

20 Memory Center **160**, and wins the game **170** by telling the requisite number of stories **161**, the other Players continue to take turns in normal order as described above, rolling the die or dice again on each turn **151**, proceed to move their marker on their path as indicated by the roll of the die or dice **104**, select a card from an appropriate deck in that Player's turn **110**, and move

25 according to the rules of the Game through the remainder of the Game as set forth above.

 It may be appreciated that movement along the paths of the Game board is therefore controlled by a variety of means - rolling die, draw cards, and landing on Memory Switches. Players (and other Players after

30 him or her) may generally prefer judgment-free storytelling over judged

questions, and so prefer using episodic memory over semantic memory, or vice versa. In addition, Players may prefer the strategies associated with Memory Lane over those associated with Memory Race. Accordingly, in certain embodiments of the Game, Players may choose to switch paths from time to time, thereby varying their play, and the memory type they employ; switching paths in such case is completely elective. In other embodiments Players are required to switch paths whenever they land on a Memory Switch, or as others move a Player's marker onto a Memory Switch. In yet other embodiments, Players may sometimes choose their path, and sometimes are required to switch paths; switching paths in such embodiments is partly required and partly elective. As a result, Players are exposed to play which requires Players, at some point in the Game, to utilize all three memory systems, i.e., the short-term memory system, the semantic memory system, and the episodic memory system in a Game having both competitive and non-competitive aspects, and in a Game with judged and non-judged tasks.

Other embodiments will be apparent to those skilled in the art from consideration of the specification and practice of the invention disclosed herein. It is intended that the specification and examples be considered as exemplary only, with a true scope of the invention being indicated by the following claims and equivalents.